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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/091,903	03/06/2002	Minoru Hato	MAT-8230US	9193
23122	7590	03/04/2004	EXAMINER	
RATNERPRESTIA P O BOX 980 VALLEY FORGE, PA 19482-0980			NGUYEN, JIMMY H	
			ART UNIT	PAPER NUMBER
			2673	

DATE MAILED: 03/04/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/091,903

Applicant(s)

HATO ET AL.

Examiner

Jimmy H. Nguyen

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 06 March 2002.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-8 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-8 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date 5.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

DETAILED ACTION

1. This Office Action is made in response to applicant's papers filed on 03/06/2002. Claims 1-8 are currently pending in the application. An action follows below:

Drawings

2. Figure 7 should be designated by a legend such as --Prior Art-- because only that which is old is illustrated. See page 4, line 3, and MPEP § 608.02(g). A proposed drawing correction or corrected drawings are required in reply to the Office action to avoid abandonment of the application. The objection to the drawings will not be held in abeyance.

Specification

3. The disclosure is objected to because of the following informalities: the abbreviated term, "EL", should be spelled in full at least once in the specification, so as to define the subject matter which applicant regards as the invention. Examiner suggests that "EL", on page 3, line 11, should be changed to -- electroluminescent (EL)--, as best understood by examiner.

Appropriate correction is required.

Claim Objections

4. Claims 1, 4, 6 and 8 are objected to under 37 CFR 1.75(a) because as best understood by examiner, although the abbreviated term, "EL", may be well-known to one skilled in the art, examiner suggests that "EL" in line 5 of claims 1, 4 and 6, and in line 3 of claim 8, should be changed to -- electroluminescent (EL)--, as best understood by examiner, so as to define the subject matter which applicant regards as the claimed invention. Additionally to claim 1, "pushbuttons", in line 6, should be changed to -- pushbutton--, so as to make this feature consistent with the feature in line 2.

It is in the best interest of the patent community that applicant, in his/her normal review and/or rewriting of the claims, to take into consideration these editorial situations and make changes as necessary.

Claim Rejections - 35 USC § 112

5. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

6. Claims 1-8 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Regarding to claims 1-7, it is not clear what the Applicants mean “both of the layers and a light-emitting layer, selectively laminated on the optically transparent insulating base”, of independent claims 1 (see last 3 lines, 4 (see lines 9-10) and 6 (see lines 9-10), since the examiner can’t understand how the layers are **selectively** laminated on the optically transparent insulating base. Further, additionally to claim 3, it is not clear what the Applicants mean “an optically transparent intermediate electrode layer selectively laminated between the optically transparent electrode layer and the backplate layer”, of claim 3, lines 2-4, since the examiner can’t understand how the electrode layer is **selectively** laminated between two layers.

Additionally to claims 4-7, the independent claims 4 and 6 recite the limitation, “said pushbutton” in lines 3-4. There is insufficient antecedent basis for this limitation in the claim.

Regarding to claim 8, this claim recites the limitations, “said lighting unit”, “said EL device” and “said push button” in lines 2-4. There is insufficient antecedent basis for these limitations in the claim.

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7. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

8. Claim 3 is rejected under 35 U.S.C. 112, first paragraph, as containing subject matter which was not described in the specification in such a way as to enable one skilled in the art to which it pertains, or with which it is most nearly connected, to make and/or use the invention.

Regarding to claim 3, when this claim is read together with independent claim 1, this claim recites **three** light emitting layers, “a light emitting layer” (see claim 1, line 11), “a first light emitting layer (see claim 3, line 5) and “a second light emitting layer” (see claim 3, lines 6-7). The disclosure, specifically fig. 4 and the corresponding description, discloses **only two** light emitting layers (18 and 24). However, the disclosure does not contain such description and details a structure of the EL device comprising three light emitting layers, as recited in claim 3, and an associate method for driving such EL device, so as to enable one skilled in the pertinent art to make and/or use the claimed invention.

9. It is noted Applicant that due to the rejection under 35 USC 112 above, the following art rejections are based as best understood by the examiner.

Claim Rejections - 35 USC § 102

10. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

11. Claims 1, 2 and 4-8 are rejected under 35 U.S.C. 102(e) as being anticipated by Shibamoto et al. (USPN: 6,346,973 B1).

As per claims 1, 2 and 4-8, the claimed invention reads on Shibamoto as follows:

Shibamoto discloses a lighting apparatus (figs. 2 and 3) comprising a lighting unit including a pushbutton (a circle portion above the opening 37, see figs. 1 and 3), a switch device (a device including elements 32, 34 and 36-38, an EL device (an EL panel 2, fig. 3) including a light emitting section (a section which is a part of EL panel 2 and disposed directly below the switch device, see fig. 3) corresponding to the pushbutton, and another light emitting section (a section which is a part of EL panel 2 and disposed directly below the LCD display device 21, see fig. 2) (a section including parts of elements 4-8 directly below the switch device, fig. 3), and a control circuit (a circuit board 1) coupled to the lighting unit via terminals 14 and 15 (fig. 4) for controlling light emission from the EL panel (2) to illuminate the pushbutton and the LCD device (21) (see col. 3, last line through col. 4, line 4, and col. 4, line 63 through col. 5, line 4).

Shibamoto further teaches the light emitting section including an optically transparent electrode layer (transparent electrode layer 5), a backplate layer (back electrode layer 7), an optically transparent insulating base (transparent film substrate 4) and a light emitting layer (an EL layer 6) (see fig. 3, col. 3, lines 52-61). Accordingly, the elements in the above claims are read in the Shibamoto reference.

Claim Rejections - 35 USC § 103

12. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are

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such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

13. Claim 3 is rejected under 35 U.S.C. 103(a) as being unpatentable over Shibamoto as applied to claim 1 above, and further in view of Barrow et al. (USPN: 4,719,385).

As per claim 3, as noting in fig. 3, Shibamoto further teaches the first light emitting layer (EL layer 6) provided between the optically transparent electrode layer (5) and the backplate layer (7). Accordingly, Shibamoto discloses all the claimed limitations except for an optically transparent intermediate electrode layer and a second light emitting layer, in the manner as recited in claim 3.

However, Barrow discloses expressly an EL device comprising an optically transparent intermediate electrode layer (16) laminated between the optically transparent electrode layer (15) and the backplate layer (26), a first light emitting layer (12) provided between the optically transparent electrode layer (15) and optically transparent intermediate electrode layer (16), and a second light emitting layer (22) provided between the optically transparent intermediate electrode layer (16) and the backplate layer (26). See fig. 2, col. 2, lines 35-64. Barrow further teaches the first light emitting layer (12) emitting light in different color for the second layer (22), thereby providing a reliable, high performance multi-color device (col. 1, lines 57-59, and col. 3, lines 18-22). It would have been obvious to a person of ordinary skill in the art at the time of the invention was made to provide an optically transparent intermediate electrode layer and a second light emitting layer, in the EL device of Shibamoto, in view of the teaching in the Barrow reference, because this would provide a reliable, high performance multi-color device, as taught by Barrow (col. 1, lines 57-59, and col. 3, lines 18-22).

Conclusion

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14. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jimmy H. Nguyen whose telephone number is (703) 306-5422.

The examiner can normally be reached on Monday - Thursday, 8:00 a.m. - 5:00 p.m..

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Bipin Shalwala can be reached at (703) 305-4938.

Any response to this action should be mailed to:

Commissioner of Patents and Trademarks

Washington, D.C. 20231

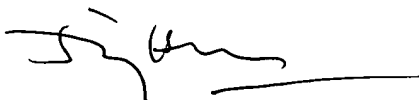
or faxed to:

(703) 872-9314 (for Technology Center 2600 only)

Hand-delivered responses should be brought to Crystal Park II, 2121 Crystal Drive, Arlington, VA, Sixth Floor (Receptionist).

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the Technology Center 2600 Customer Service Office whose telephone number is (703) 306-0377.

JHN
March 2, 2004



Jimmy H. Nguyen
Examiner
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